

Applicant : Winston I. Way  
Serial No.: 09/755,136  
Filed : January 8, 2001  
Page : 25 of 31

Attorney's Docket No.: 14723-004001

#### REMARKS

Applicant respectfully requests the patent office to reconsider and allow the application as amended.

As an initial matter, Applicant gratefully acknowledges the examiner's allowance of Claims 31-34.

#### Status of Claims

Non-elected Claims 24-30, 35-48 and 56-62, which have been withdrawn from consideration by the Patent Office, have been cancelled. Claims 1, 13, 23, 31, and 49 have been amended and the amendments are fully supported by the original specification. New Claims 63-68 directed to the elected Species IV corresponding to FIG. 3B have been added. No new matter is added.

Upon entry of the above amendment, Claims 1-23, 31-34, 49-55, and 63-68 are pending and are patentable.

#### Claims 1 and 13 are generic to elected species IV, FIG. 3B

The Office Action contend that Claims 1 and 13 are not generic to the elected Species IV, FIG. 3B because the word "adjacent" is used for the WDM channels within the one ITU WDM window whereas FIG. 3B shows that channels "L" and "B" are not physically adjacent to each other. This interpretation is

Applicant : Winston I. Way  
Serial No.: 09/755,136  
Filed : January 8, 2001  
Page : 26 of 31

Attorney's Docket No.: 14723-004001

incorrect based on the disclosure of the specification because at least one buffer channel is empty in the input WDM signal and may be located between two occupied WDM channels. Accordingly, Claims 1 and 13 have been amended to remove the word "adjacent." It is respectfully suggested that amended Claims 1 and 13 and their dependent claims 4-5 and 14-15 are generic to elected Species IV, FIG. 3B.

Therefore, Applicants respectfully submit that Claims 1-5 and 13-15 should not be withdrawn from consideration and should be examined.

**Claims 10 and 20 and their dependent Claims 52-55**

Claims 10 and 20 were fully examined on their merits and were previously allowed by the Patent Office. See Office Actions dated April 21, 2003 and November 21, 2003. Applicant amended previously dependent Claims 10 and 20 into independent form in Applicant's response dated August 21, 2003. Subsequently, the Office Action dated November 21, 2003 allowed the amended Claims 10 and 20.

The restriction in the subsequent Office Action dated July 13, 2004 does not change the allowance status of Claims 10 and 20 as amended. Hence, it is respectfully requested that Claims 10 and 20 be indicated as allowed in the next Office Action.

Applicant : Winston I. Way  
Serial No.: 09/755,136  
Filed : January 8, 2001  
Page : 27 of 31

Attorney's Docket No.: 14723-004001

Claims 52-55 are dependent on Claims 10 and 20. Therefore, Claims 52-55 should also be allowed.

### Claim 23

Claim 23 stands rejected under 35 USC 103(a) as being obvious over Sotom in view of ITU-T G.692. This contention, however, is respectfully traversed for the following reasons.

First, Claim 23 recites the use of an empty input WDM channel as a buffer WDM channel. Nothing in Sotom discloses or suggests such use of a buffer WDM channel. The cited ITU document ITU-T G.692 certainly does not teach this feature either. Therefore, the combined teaching of Sotom and the cited ITU document ITU-T G.692 fails to disclose at least this aspect of Claim 23. Under 35 USC 103(a), Claim 23 is patentable.

Second, Claim 23 as amended recites "converting payload data carried in one input WDM channel to the buffer WDM channel to leave the one input WDM channel available for carrying different data." The combined teaching of Sotom and the cited ITU document ITU-T G.692 is completely silent on this feature. Hence, Claim 23 as amended is patentable for this reason alone.

Third, Claim 23 as amended also recites "modifying the label information to produce modified label information to reflect the conversion of the payload data from the one input

Applicant : Winston I. Way  
Serial No.: 09/755,136  
Filed : January 8, 2001  
Page : 28 of 31

Attorney's Docket No.: 14723-004001

WDM channel to the buffer WDM channel" and "re-combining the modified label information with the payload carried by the WDM channels to produce an output optical signal including the payload and the modified label information." Again, this feature is not disclosed or suggested by Sotom and the cited ITU document ITU-T G.692.

Therefore, Claim 23 as amended is distinctly different from and thus is patentable over Sotom and the cited ITU document ITU-T G.692.

#### Claims 49-50

Claims 49-50 stand rejected under 35 USC 112, second paragraph, as being indefinite. Claim 49 has been amended to further clarify the language. The rejections should be withdrawn.

Claims 49-50 further stand rejected under 35 USC 103(a) as being obvious over Sotom in view of the ITU document ITU-T G.692 and further in view of Frigo. Applicant respectfully traverses.

Claim 49 recites use of at least one empty WDM channel which is reserved as a buffer channel. Sotom does not disclose this in FIG. 4 or anywhere else in its disclosure. The ITU document ITU-T G.692 is completely silent on this. Frigo discloses add/drop in a node system in FIGs. 4, 5, and 6 and

Applicant : Winston I. Way  
Serial No.: 09/755,136  
Filed : January 8, 2001  
Page : 29 of 31

Attorney's Docket No.: 14723-004001

fails to disclose this feature. Hence, the combined teaching of the 3 cited references does not teach or suggest Claim 49 and its dependent Claim 50 for this reason alone.

Claim 49 as amended further recites:

converting the third optical signal into an electronic data signal wherein a signal channel corresponding to a selected WDM channel is shifted to a signal channel that corresponds to the buffer channel;

converting the first optical signal into an electronic label signal which has new label information to reflect updated channel information after channel shifting in the electronic data signal; and

modulating the second optical signal to produce a new optical WDM signal having WDM channels therein which carry a new label channel with the updated channel information and data.

Nothing in the cited 3 references, either individually or collectively, suggests these features.

Therefore, Claims 49-50 are patentable.

#### Claim 51

Claim 51 stands rejected under 35 USC 103(a) as being obvious over Sotom in view of the ITU document ITU-T G.692 and

Applicant : Winston I. Way  
Serial No.: 09/755,136  
Filed : January 8, 2001  
Page : 30 of 31

Attorney's Docket No.: 14723-004001

Frigo as applied above, and further in view of Izutsu.

Applicant respectfully traverses.

As discussed above for Claim 49, Sotom, the ITU document ITU-T G.692 and Frigo fail to disclose and suggest various features in Claim 51. Izutsu is cited to show the use of OSSB modulator. Izutsu, however, does not fill in the voids left by Sotom, the ITU document ITU-T G.692 and Frigo. As such, the combination of the disclosure of Sotom, the ITU document ITU-T G.692 and Frigo and the disclosure of Izutsu fails to teach each element in Claim 51.

Therefore, Claim 51 is patentable.

#### **New Claims 63-68**

Claims 63-68 are newly added based on the disclosure in FIG. 3B and pages 11-12 of the original specification. Nothing in the cited prior art suggests the method and device for separation of the input WDM signal into three optical signals and the processing of the three optical signals as claimed. Hence, Claims 63-68 are patentable over the prior art on record.

#### **Conclusion**

In view of the above amendments and remarks, all pending claims are patentable. Applicant respectfully submits that each

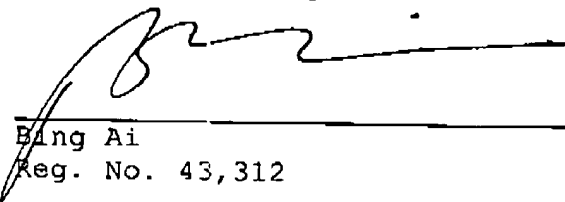
Applicant : Winston I. Way  
Serial No.: 09/755,136  
Filed : January 8, 2001  
Page : 31 of 31

Attorney's Docket No.: 14723-004001

and every issue raised by the Patent Office has been fully addressed and resolved. Therefore, the application is now in full condition for allowance.

Please apply a fee of \$60 for an extension of time for 1 month, and any other applicable charges or credits, to Deposit Account No. 06-1050.

Respectfully submitted,

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